

DRAWING AMENDMENTS

Responsive to the Examiner's objections to FIG. 1, the term "Conventional" has been added as required.

This changed is reflected in the attached Replacement Drawing Sheet. Entry of this drawing amendment is respectfully requested.

Attachment: Replacement Drawing Sheet (1 sheet - FIG. 1)

REMARKS

Claims 12-22 are now pending in this application. Claims 12, 21, and 22 are independent. Claims 1-11 have been canceled and claims 12-22 have been added by this amendment. No new matter is involved with any new claim.

Information Disclosure Statement (IDS)

Withdrawal of the objection to the IDS under 37 C.F.R. § 1.98(a)(3) is requested, particularly with respect to DE-850018, DE-1050430, and DE-1191884. The Examiner objects because English-language abstracts were not provided or found by the Examiner for these references.

As stated in the IDS, these references were cited in the prosecution of a related application, specifically the parent PCT application. The statement of relevance provided in the IDS specifically stated:

“A concise explanation of relevance of the items listed on form PTO/SB/08 is given for only non-English language listed items. The non-English items were cited by a foreign patent office during the examination of the parent PCT application.”

To the undersigned’s knowledge and belief, citation by the International Examiner in the PCT application is reason that these references were believed to be relevant, and therefore cited in the IDS filed 6/29/2004. After a reasonable search, the undersigned is unaware of any English-language abstract for the three references objected to by the Examiner.

Applicants submit that the IDS was submitted in good faith and in substantial compliance with the Patent Rules under 37 C.F.R. As a further aid to the Examiner, a copy of the International Search Report (ISR) for the parent PCT application is provided as an attachment to this Amendment.

Consideration of the three objected-to references is respectfully requested.

Drawing Objection

Withdrawal of the objection to drawing FIG. 1 is requested. The caption "Conventional" has been added to FIG. 1 in the attached Replacement Drawing Sheet as required by the Examiner. Entry of the Drawing Amendment is respectfully requested.

Claim Objections

Withdrawal of the objection to claims 1 and 4 is requested. These claims have been canceled, thus rendering their rejection moot.

Unpatentability Rejection over Kortschinski et al. in view of Sanford and Puccinelli

Withdrawal of the rejection of claims 1, 2, 4, 6-8, and 11 under 35 U.S.C. 103(a) as being unpatentable over Kortschinski et al. (US 4,710,847) in view of Sanford (US 2,150,249) and Puccinelli et al. (US 4,644,438) is requested.

These claims have been canceled, thus rendering their rejection moot.

Unpatentability Rejection over Kortschinski et al. in view of Sanford

Withdrawal of the rejection of claims 1, 3, and 5 under 35 U.S.C. 103(a) as being unpatentable over Kortschinski in view of Sanford is requested.

These claims have been canceled, thus rendering their rejection moot.

Unpatentability Rejection over Kortschinski in view of Sanford, Puccinelli and Castonguay

Withdrawal of the rejection of claims 9 and 10 under 35 U.S.C 103(a) as being unpatentable over Kortschinski et al. in view of Sanford, Puccinelli et al. and Castonguay (US 4489362) is requested.

These claims have been canceled, thus rendering their rejection moot.

New Claims

New claims 12-22 have been drafted to avoid the previous objections and applied art. No new matter is involved with any new claim. Consideration and allowance of claims 12-22 are requested.

New independent claims 12 and 21 find support at least in original claims 1 and 11, respectively, and in the description at least at paragraphs [0037], [0038], and [0047], as well as in FIG. 3. New claim 15 finds support at least at paragraph [0036] and new claim 17 finds support at least in original claim 6. Applicants submit that the subject matter of claims 13-14, 16, and 18-20 find support at least in original claims 2, 3, 5, and 8-10, respectively.

These claims are submitted as being novel and non-obvious over the art of record.

For example, the current limiting device of Kortschinski et al does not disclose the claimed switching system to replace the blown fuses and a control unit, and which estimate the magnitude of the fault and which selectively operates the fast switching means and/or a circuit breaker depending on the estimated fault current values. In such a device, only a device for sensing and triggering the fast switching means is present (see element 18 in FIG. 1 of Kortschinski et al.)

The device of Sanford does not disclose, at all, the claimed switching means/fast switch, control unit, and circuit breaker.

Puccinelli et al. is silent on any disclosure that the control device provides a forecast concerning the final fault current values. In addition, in the device of Puccinelli et al., only current measurements are disclosed. Further, Puccinelli et al. is silent on any disclosure that the control unit makes a selection of the switching devices to be operated, *i.e.*, the circuit breaker and/or the fast switch/switching means depending on the final level of the fault current that is estimated by the control unit.

Thus, Applicants submit that none of the cited documents discloses the full combination of features of new independent claims 12, 21, and 22, and that even if various recited elements are taught or suggested by the applied art, the requisite motivation to combine the various elements is only found in Applicants' disclosure, and not in the applied art.

Accordingly, consideration and allowance of new claims 12-22 are respectfully requested.

Conclusion

In view of the above amendment and remarks, applicant believes that each of pending claims 12-22 in this application is in immediate condition for allowance. An early indication of the same would be appreciated.

In the event the Examiner believes that an interview would be helpful in resolving any outstanding issues in this case, the undersigned attorney is available at the telephone number indicated below.

For any fee that is due, including fees for extensions of time, please charge CBLH Deposit Account No. 22-0185, under Order No. 22106-00067-US1 from which the undersigned is authorized to draw.

Respectfully submitted,

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Attachment: Replacement Drawing Sheet (1 sheet - FIG. 1)
PCT International Search Report (PCT/EP02/14890) (parent application)

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 02/14890

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H01H9/10 H01H85/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 850 018 C (SIEMENS SCHUCKERTWERKE AG BERL) 22 September 1952 (1952-09-22)	1-4, 8
Y	claims 1,9 page 3, line 29 - line 37 ---	5-7
X	DE 10 50 430 B (SIEMENS)	1-4, 8
Y	the whole document ---	5-7
X	CH 311 386 A (FKG AG)	1-4, 8
Y	30 November 1955 (1955-11-30) the whole document ---	5-7
X	FR 2 478 868 A (ALSTHOM ATLANTIQUE)	1-4, 8
Y	25 September 1981 (1981-09-25) the whole document ---	5-7
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

28 April 2003

Date of mailing of the international search report

08/05/2003

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 02/14890

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	TUNG CHAO: "ELECTRONICALLY CONTROLLED CURRENT LIMITING FUSES" RECORD OF THE ANNUAL PULP AND PAPER INDUSTRY TECHNICAL CONFERENCE. VANCOUVER, JUNE 12 - 16, 1995, NEW YORK, IEEE, US, 12 June 1995 (1995-06-12), pages 205-222, XP000738189 ISBN: 0-7803-2419-6 the whole document ---	5-7
A	DE 11 91 884 B (LICENTIA GMBH) 29 April 1965 (1965-04-29) ---	
A	DE 30 06 336 A (CALOR EMAG ELEKTRIZITAETS AG) 27 August 1981 (1981-08-27) -----	

INTERNATIONAL SEARCH REPORT

 International Application No
 PCT/EP 02/14890

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 850018	C	22-09-1952	NONE
DE 1050430	B	NONE	
CH 311386	A	30-11-1955	BE 537621 A CH 321393 A 30-04-1957 FR 68908 E 23-07-1958 FR 1093120 A 02-05-1955 GB 748532 A 02-05-1956
FR 2478868	A	25-09-1981	FR 2478868 A1 25-09-1981
DE 1191884	B	29-04-1965	NONE
DE 3006336	A	27-08-1981	DE 3006336 A1 27-08-1981